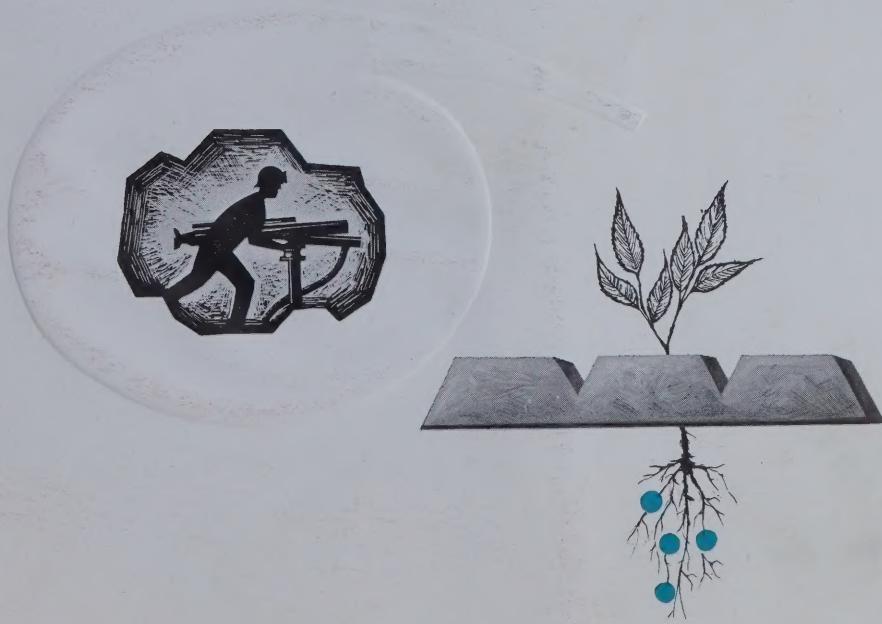
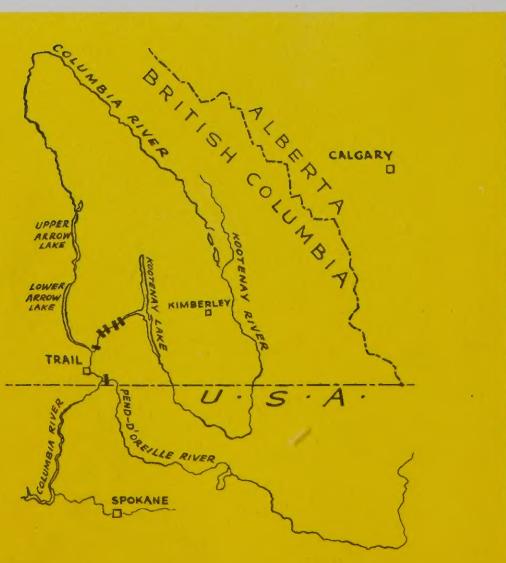


**THE CONSOLIDATED MINING AND  
SMELTING COMPANY OF CANADA  
LIMITED ANNUAL REPORT 1959**





*The Waneta Power Plant, on the Pend-d'Oreille River at its confluence with the Columbia.*



Cominco's substantial electric power requirements in the Kootenay districts of British Columbia are served by Company-owned hydro-electric plants on the Kootenay and Pend-d'Oreille rivers. These have been developed through the years to keep pace with increasing needs. Present installed capacity totals 569,000 horsepower. Waneta, pictured above, is the largest plant and was completed in 1954. Two generating units develop a total of 240,000 horsepower, and there are settings for two additional units. It has a spillway height of 210 feet, and the dam is 950 feet long at the deck. The Waneta plant, and four on the Kootenay River, serve all Company operations in the Trail to Kimberley area. A fifth plant on the Kootenay River is owned by a subsidiary, West Kootenay Power and Light Company, Limited.

**THE CONSOLIDATED MINING AND  
SMELTING COMPANY OF CANADA  
LIMITED 54th ANNUAL REPORT**

**FOR THE YEAR ENDED DECEMBER 31, 1959**

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# THE CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA LIMITED

Head Office: 215 St. James St. West, Montreal, Canada

## Directors

L. J. BELNAP	R. D. HARKNESS	W. A. MATHER*
A. L. BISHOP	G. A. HART	R. S. McLAUGHLIN
N. R. CRUMP*	R. HENDRICKS*	R. H. McMASTER*
GORDON FARRELL	W. S. KIRKPATRICK*	R. D. PERRY
	R. E. STAVERT*	H. G. WELSFORD

\*Member of Executive Committee

## Officers

R. E. STAVERT <i>Chairman</i>	W. S. KIRKPATRICK <i>President</i>	
N. R. CRUMP <i>Vice-President</i>	R. HENDRICKS <i>Executive Vice-President</i>	R. D. PERRY <i>Vice-President and General Manager</i>
G. A. WALLINGER <i>Vice-President and Comptroller</i>	W. G. JEWITT <i>Vice-President in Charge of Mines</i>	D. D. MORRIS <i>Assistant General Manager</i>
F. L. HALLAM <i>Secretary-Treasurer</i>	L. O. REID <i>Assistant Secretary</i>	K. E. CLARE <i>Assistant Treasurer</i>

## Transfer Agents

THE ROYAL TRUST COMPANY, MONTREAL  
THE ROYAL TRUST COMPANY, VANCOUVER  
THE TORONTO GENERAL TRUSTS CORPORATION, TORONTO  
BANK OF MONTREAL TRUST COMPANY, NEW YORK

## Registrars

MONTRAL TRUST COMPANY, MONTREAL  
MONTRAL TRUST COMPANY, VANCOUVER  
CROWN TRUST COMPANY, TORONTO  
CHEMICAL BANK NEW YORK TRUST COMPANY, NEW YORK

# Directors' Report

MONTRÉAL, P.Q., 10TH MARCH, 1960.

To the Shareholders of The Consolidated Mining and Smelting Company of Canada Limited.

*Your directors submit herewith the consolidated financial statements and Auditors' Report for the year ended 31st December, 1959.*

## Financial

Consolidated revenue from the sales of all products amounted to \$110,-084,379 in 1959, compared to \$103,900,459 in 1958.

After providing for income and mining taxes and depreciation of plants the consolidated net profit for the year was \$16,704,310, which was carried to Unappropriated Surplus Account. For the year regular dividends of \$0.80 per share were declared amounting to \$13,104,262.

Compared with 1958, the higher earnings resulted from a substantial increase in the price of zinc, partly offset by the lower prices of lead and fertilizers. Labour rates and prices of operating supplies again showed an increase over the previous year. Inventories of products and raw materials were essentially unchanged from the end of last year.

The consolidated net revenue from export sales continued to be adversely affected by the discount on U.S. funds and the pound sterling in relation to Canadian currency. During 1959 the average discount of the U.S. dollar under the Canadian dollar was  $4\frac{3}{32}\%$  compared to  $2\frac{15}{16}\%$  in 1958.

The consolidated net expenditures during the year which were charged to property, buildings and equipment amounted to \$7,276,089. The larger items were as follows:

Coke ammonia plant conversion to natural gas . . . . .	\$ 755,168
Urea plant . . . . .	1,258,617
Iron and steel plant . . . . .	1,211,462

At the year-end working capital amounted to \$95,925,179, an increase of \$3,607,124 during the year.

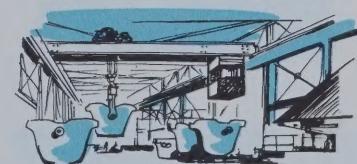
## Mining and Exploration

The tonnage of ore extracted from the Sullivan mine at Kimberley, British Columbia, for the year 1959 was 2,440,396 tons compared to 2,443,884 tons in 1958. Underground development and backfilling continued as required for the present rate of mining which is in line with long-term plans for the optimum extraction of the orebody. Rock excavation was nearly completed on the 500-foot extension to the main shaft to open two new levels for production.

Production from the Bluebell lead-zinc mine at Riondel, British Columbia, was 251,366 tons compared to 255,859 tons in 1958. Shaft sinking to lower levels is in progress at this mine but is still experiencing some difficulty on account of the subterranean water flows referred to in the report for 1957. At the HB zinc-lead mine near Salmo, British Columbia, production totalled 463,504 tons compared to 458,213 tons in 1958.

Ore treated at the Con mill at Yellowknife, Northwest Territories, totalled 191,299 tons compared to 188,497 tons in 1958. The ore treated in 1959 was made up of 115,593 tons averaging 0.50 ounces of gold per ton from the Con mine and 75,706 tons averaging 0.58 ounces gold per ton from the adjoining Rycon Mines Limited, a subsidiary company.

Production from the phosphate mines in Montana was 372,743 tons as required by the Trail and Kimberley fertilizer operations. Further additions were made to reserves of phosphate rock. These are now



considered adequate for long-term fertilizer production requirements.

An active and widespread program of exploration in search of new mines was continued. Twenty properties were optioned out of eighty-four examined, and Company prospectors staked an additional nine properties. Surface development work, including nearly 30,000 feet of diamond drilling, was carried out on twenty-seven properties. Underground exploration programs were commenced at three properties. In New Brunswick at the Company's Wedge copper property, an access road, power supply and camp facilities were established, and a shaft planned for 1,150 feet had been sunk to 510 feet at the year-end. At the Duncan lead-zinc property in the Lardeau area of British Columbia, a 990-foot adit was driven and 1,200 feet of drifting was done on the main ore zone. The development of this property is continuing. An adit at the Double Ed copper property near Anyox, British Columbia, had reached 1,900 feet at the year-end with 700 feet remaining to be driven. Underground exploration at the copper property owned by Sunro Mines Limited (N.P.L.) was completed without success in finding increased reserves. No further work is planned on this property at present. As previously reported, exploration development at the property of Pine Point Mines Limited, in the Northwest Territories, had, by 1954, proved an extensive zinc-lead ore deposit and no further work has been done since that time. This important deposit can be brought into production when suitable transportation facilities are provided. A recommendation as to the route of a proposed railroad is expected shortly from the Royal Commission on the Great Slave Lake Railway.

### Metal Production and Sales

Lead produced for market amounted to 140,881 tons compared to 134,827 tons in 1958. As a result of voluntary restrictions in deliveries to market there was a substantial increase in inventories of lead-bearing material in process at the end of 1959 as compared to that at the end of 1958. Zinc production was 194,499 tons compared to 193,514 tons in 1958. Of the combined lead-zinc production of 335,380 tons approximately 64% was derived from Sullivan concentrates, 14% from the concentrates from other company mines, 11% from the re-treatment of stockpiles of zinc plant residues and lead blast furnace slag, and 11% from purchased ores and concentrates. These stockpiles, accumulated over many years of earlier operations, provide a source of low cost metal and make an important contribution to current profits. At present rates of treatment they will be exhausted by about 1962. Purchased ores and concentrates in 1959 were principally from Canadian shippers and totalled 72,684 tons compared to 48,149 tons in 1958. Operations of the Trail lead smelter showed substantial benefits from the smelter revision program and recent advances in sintering procedures.

The difficult conditions which prevailed in world lead and zinc markets in 1958 eased somewhat in 1959, particularly in the case of zinc. World inventories of refined lead and zinc in the hands of both consumers and producers declined. In the case of zinc this resulted in price appreciation in all world markets. Lead prices reacted less favourably but at the year-end the statistical position had improved and there was evidence of growing strength. London Metal Exchange prices, which reflect world conditions, averaged for the year: zinc 9.88¢ and lead 8.51¢, and at the close of the year were: zinc 11.31¢ and lead 8.82¢, all in Canadian currency per pound of metal.

World consumption of both metals increased, reflecting the accelerating economic tempo of Western Europe and North America following the 1957-1958 recession. Last year's report referred to meetings of delegates from lead and zinc producing and consuming countries held under the sponsorship of the United Nations Interim Co-ordinating Committee for International Commodity Arrangements. A further meeting under



United Nations' sponsorship was held in New York in April-May, 1959. Following these discussions producers made an effort to balance production and consumption of lead and zinc by voluntary curtailment of deliveries.

The pattern of sales established during recent years did not vary to any great extent and sales of lead and zinc were fairly evenly distributed between Canada, the United Kingdom, and the United States. Inventories of finished metal at the year-end were at satisfactory levels.

Import quotas which were instituted by the United States administration on 1st October, 1958, on lead and zinc metal and on lead and zinc ores and concentrates entering the United States persisted throughout 1959. The Company continues to support the Canadian Government's position that import restrictions of any kind and international controls are harmful to the industry.

In the conviction that the expanding use of lead and zinc is essential to the continuing welfare of the industry the Company accelerated its program of metal-use research. With the same object, work continued in the development of extrusion methods for the fabrication of certain zinc products and semi-commercial production has now been achieved. During the year the Company also took the step of acquiring National Hardware Specialties Limited which operates a zinc die-casting plant at Dresden, Ontario. The accounts of this subsidiary are incorporated in this year's financial statements.

Silver production was 9,367,029 ounces compared to 12,875,160 ounces in 1958, and sales were affected accordingly. A large proportion of the silver production is derived from purchased ores and concentrates, and the decrease was the result of reduced purchases of materials of high silver content. The United States price of silver showed minor variations, closing at  $91\frac{3}{8}\frac{c}{e}$  per ounce, slightly up from the beginning of the year.

Productions of bismuth, cadmium and antimonial lead were normal, in line with sales requirements which showed satisfactory increases during the year. The price of bismuth remained stable in all markets in 1959. Cadmium prices which were weak at the beginning of the year in all major markets strengthened appreciably in the latter part of the year. The production of tin concentrates was marketed without difficulty. In line with market opportunities, there was a substantial increase in the production of indium and also of products for the electronic industry, including indium preforms and salts and other high purity metals and their preforms.

## Chemical and Fertilizer Production and Sales

Solid fertilizer production was 620,162 tons compared to 656,697 tons in 1958. Liquid fertilizer production was 56,046 tons compared to 45,714 tons. A wide range of solid and liquid fertilizers was produced to suit customer requirements. When urea is available from the plant now under construction at Calgary, improved solid and liquid products will be made by incorporating this chemical. In addition to being a very desirable fertilizer, urea has uses in animal husbandry and the chemical industry.

The highly competitive situation in world fertilizer markets resulting from the over-supply of nitrogenous materials continued unabated during 1959. Notwithstanding this factor, sales of the Company's fertilizer products increased substantially over the previous year but prices were generally lower than in 1958.

Canadian sales increased slightly as anticipated, and in line with the gradual improvement in general economic conditions on the Canadian prairies. Total Cominco sales in United States markets showed a minor decrease in comparison with the previous year. This was the result of the intense competitive activity in California and in West Coast markets generally, which was offset only partially by increased sales in the Mid-





western area. Sales of liquid fertilizer products in the Northwestern United States increased satisfactorily and in line with market development planning. Competitive price activity in both Canadian and United States market areas was again marked by a regrettable increase in the use of discounts and extended credits.

Efforts to expand sales in offshore markets during 1959 were successful in increasing these exports by 75 percent over the previous year. Large tonnages were sold in Korea, Colombia, Spain, India and Indonesia with lesser amounts to the Philippines, Peru, Chile, Hawaii and Guatemala. The Spanish sale was the Company's first large-scale bulk movement in a number of years and it is anticipated that the competitive situation will require increased offerings on a bulk basis for many offshore destinations in the future. Severe competition from European and Japanese producers continued and as a result prices in all offshore markets remained at unsatisfactory levels.

The successful sales endeavours in offshore markets allowed the reduction of year-end inventories to the level necessary to protect the spring sales position for Canadian and United States markets.

Sales of ammonium nitrate for commercial use in Canada again increased, and sales of chemicals such as anhydrous ammonia, sulphuric acid and sulphur dioxide were maintained.

### **Engineering, Maintenance and Construction**

Construction is proceeding satisfactorily of the first units of a plant to produce pig iron and steel at Kimberley, which was announced last spring. Production of pig iron at the initial rate of 36,000 tons per year is expected to start about the end of this year.

At Calgary, construction is well advanced on a urea plant of 36,000 tons per year designed capacity which is being built adjacent to the Company's ammonia plant. Operation is scheduled to commence in July.

In December, 1959, the Company announced the start of construction of a chlor-alkali plant at Trail. The Company has contracted to supply the caustic soda and chlorine requirements of Celgar Limited for their kraft pulp mill now under construction near Castlegar, British Columbia. It is also planned to produce caustic potash.

During 1959 further improvements in economy and efficiency were obtained by the continued installation of automatic controls and by the use of natural gas now available at Trail to replace the more expensive coal, coke and oil in many operations.

The Company's hydro-electric plants on the Kootenay and Pend-d'Oreille rivers operated satisfactorily throughout the year, with water flows adequate for power requirements. Energy generated for the year 1959 amounted to 2,230 Million kwh compared to 2,217 Million kwh in 1958. Contractual arrangements were made for the supply of power to Celgar Limited.

### **Personnel**



Labour supply at all operations was adequate. The number of employees on the active roll at the year-end was 6,985 compared to 7,101 at the end of 1958. Wage negotiations were conducted at all major British Columbia operations and at the Con mine, and resulted in three-year settlements. There were no work stoppages.

In March 1959, the by-laws of the Pension Fund Society, which provides non-contributory pensions to retired employees, were amended to give deferred vesting rights to employees at age 50 with 20 years' service. Also, commutation in favour of a widow is now offered on the attainment of 25 years of continuous service. During 1959 the Company contributed \$1,733,000 to the Pension Fund Society, bringing the total fund to \$38,547,000 at 31st December, 1959. Since inception of the pension scheme in 1926, 1,334 employees have retired on service pensions. At the

end of the year 816 former employees and widows of former employees were receiving pensions from the Society as compared to 762 at the end of 1958.

For the second successive year a new low record of lost-time accidents was established, reflecting the effectiveness of the Company's safety program and the excellent co-operation of the employees. The HB zinc-lead mine had the distinction of being a co-recipient of the John T. Ryan Trophy in 1959. This trophy is awarded annually by the Canadian Institute of Mining and Metallurgy in recognition of the best safety record in the Canadian metalliferous mining industry for the previous year. The regional trophy for the Prairie Provinces and Northwest Territories was awarded to the Con Mine.

### Research and Development

During the past year the Company continued to take a very active part in the development of the long-term co-operative research program conducted under the auspices of the American Zinc Institute and the Lead Industries Association, in co-operation with other North American, South American and Australian lead-zinc producers. This program, which commenced in 1958, has already yielded important benefits to the industry. In addition, considerable research, designed to expand the uses of lead and zinc, was carried on in the Company's laboratories. Subjects studied included cathodic protection with zinc anodes and with zinc-rich paint, the fabrication of zinc, and the properties of zinc die-casting alloys. Some success has been achieved in producing an anodized coating on zinc and zinc alloys.

Emphasis was again placed on technical research on the production of materials for the rapidly growing electronics industry. This included the refining of several additional metals to a very high degree of purity and the production from them of intermetallic compounds for thermoelectric applications, such as refrigerators with no working parts and devices for the direct conversion of heat to electricity. Research continued on the production of columbium and other metals for high temperature applications.

Market Research and Sales Development activities were broadened during the year to provide more complete market information, technical service and market development on existing and potential products.

### Staff Changes

At the Board meeting immediately following the Annual General Meeting of Shareholders held on the 23rd April, Mr. R. E. Stavert, who had been President since 1945, was elected Chairman of the Company, and Mr. W. S. Kirkpatrick, formerly Executive Vice-President, was elected President, and Mr. N. R. Crump, Vice-President. Mr. R. Hendricks, formerly Vice-President in Charge of Sales, was elected Executive Vice-President. Mr. F. L. Hallam, formerly Assistant to the President, was appointed to the new position of Secretary-Treasurer.

In September Mr. A. O. Wolff was appointed Director of Research and Development and was succeeded as Manager of Metal Sales Division by Mr. H. T. Fargey, formerly Administrative Assistant at Montreal.

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The Directors wish to express their appreciation of the co-operation and faithful service of the employees.

On behalf of the Board,



*W.S. Kirkpatrick*

*President.*



# Consolidated Balance Sheet

as at December 31, 1959

With comparative figures for 1958

## ASSETS

	1959	1958
<b>Current Assets:</b>		
Cash . . . . .	\$ 3,340,495	\$ 4,266,521
Notes, loans and other short term investment contracts . . . . .	12,547,068	26,854,937
Government, municipal and commercial bonds (including securities held for the insurance reserve):		
At cost or lower (market value: 1959, \$50,145,819; 1958, \$24,940,425) . . . . .	50,692,643	25,824,124
Accounts receivable and accrued revenue, less allowance for doubtful accounts . . . . .	10,616,735	11,812,228
Prepaid charges . . . . .	4,137,457	5,070,341
Inventories of raw materials and products:		
In accordance with records and certified by officials of the companies. Valued at cost or market, whichever is lower . . . . .	27,476,211	27,456,267
Stores and materials:		
In accordance with records periodically verified by physical inventories and certified by officials of the companies. Valued at cost less accumulated depreciation . . . . .	7,603,510	\$116,414,119
<b>Investments and Sundry Non-Current Assets:</b>	<hr/>	<hr/>
Unconsolidated subsidiary companies:		
Shares . . . . .	10,633,307	10,508,439
Bonds . . . . .	709,960	709,960
Advances . . . . .	3,629,439	3,133,891
Less accumulated depreciation of investments in unconsolidated subsidiary mining companies . . . . .	14,972,706	14,352,290
	5,577,315	5,577,315
Shares in other companies . . . . .	9,395,391	8,774,975
Deferred charges . . . . .	306,015	306,015
Sundry loans and accounts receivable . . . . .	137,030	87,694
	724,467	10,562,903
<b>Property, Buildings and Equipment:</b>	<hr/>	<hr/>
Mines, mineral rights and mining investments at cost (including shares in other mining companies: 1959, \$1,696,716; 1958, \$1,616,741) and land, buildings and equipment at cost, less depreciation written off and sales at realized prices . . . . .	140,608,967	141,656,375
Less accumulated depletion and depreciation . . . . .	80,429,605	60,179,362
	<hr/>	<hr/>
	\$187,156,384	\$180,793,467

## LIABILITIES

	1959	1958
<b>Current Liabilities:</b>		
Accounts payable—sundry . . . . .	\$ 7,715,513	\$ 6,806,456
Accounts payable—unconsolidated subsidiary companies . . . . .	29,944	97,757
Payments received in advance on sales contracts . . . . .	373,993	—
Estimated income and mining taxes payable . . . . .	5,801,299	3,094,625
Dividends payable . . . . .	<u>6,568,191</u>	<u>\$ 20,488,940</u>
	<u>6,568,191</u>	<u>\$ 20,488,940</u>
<b>Reserves:</b>		
Insurance . . . . .	3,929,381	3,921,432
Accumulated tax reductions applicable to future years . . . . .	<u>80,000</u>	<u>4,009,381</u>
	<u>80,000</u>	<u>4,009,381</u>
	<u>80,000</u>	<u>380,000</u>
		4,301,432
<b>Capital and Surplus:</b>		
Capital:		
Authorized 20,000,000 shares of no par value: issued and fully paid 16,381,645 shares . . . . .	23,966,890	23,966,890
Appropriated surplus . . . . .	80,000,000	80,000,000
Unappropriated surplus . . . . .	<u>58,691,173</u>	<u>162,658,063</u>
	<u>58,691,173</u>	<u>162,658,063</u>
	<u>58,691,173</u>	<u>55,957,239</u>
		159,924,129
<b>Commitments and Contingent Liabilities</b>		
	1959	1958
Commitments under construction in progress estimated not to exceed . . . . .	\$ 5,000,000	\$ 700,000
Sundry guarantees, commitments and claims (estimated) . . . . .	1,450,000	1,600,000
<b>On behalf of the Board:</b>		
R. E. STAVERT	\$187,156,384	\$180,793,467
W. S. KIRKPATRICK		

## Consolidated Statement of Profit and Loss

For the Year Ended December 31, 1959

With comparative figures for 1958

	1959	1958
<b>Profit from Operations</b> after deducting depreciation and taxes and all expenses of mining, smelting, chemical and fertilizer manufacture, selling and administration . . . . .	<b>\$13,594,387</b>	<b>\$11,313,498</b>
<i>Add:</i>		
Dividend from profits of prior years received from a subsidiary company in liquidation . . . . .	—	23,783
Income from investments . . . . .	3,107,004	2,446,950
Net profit from sale of securities . . . . .	2,919	233,652
	<u>3,109,923</u>	<u>2,704,385</u>
<b>Net Profit Carried to Unappropriated Surplus Account</b> . . . . .	<b><u>\$16,704,310</u></b>	<b><u>\$14,017,883</u></b>

The following amounts have been included before determining the profit for the year:

Provision for income and mining taxes (see note below) . . . . .	\$10,100,000	\$ 6,700,000
Provision for depreciation of plant and equipment . . . . .	9,392,384	9,598,668
Directors' fees and remuneration (excluding for 1959 \$440 and for 1958 \$460 paid by unconsolidated subsidiary company) . .	20,873	22,900
Executive officers' fees and remuneration . . . . .	337,566	311,780
Proportion of total legal remuneration of . . . . .	119,182	118,186

**NOTE:** It is estimated that the taxes actually payable for 1959 will amount to \$10,400,000. The difference between that amount and \$10,100,000 results from transfers of income, for tax purposes only, between years and has been taken into account in determining the balance sheet item "Accumulated Tax Reductions Applicable to Future Years", which represents the net tax postponement at December 31, 1959 from such transfers.

## Consolidated Statement of Earned Surplus

### Appropriated Surplus Invested in the Company's Undertakings

	1959	1958
Balance at beginning of period . . . . .	\$80,000,000	\$87,000,000
Deduct transfer to unappropriated surplus . . . . .	—	7,000,000
<b>Balance at end of period, per Balance Sheet . . . . .</b>	<b>\$80,000,000</b>	<b>\$80,000,000</b>

### Unappropriated Surplus:

Balance at beginning of period . . . . .      \$55,957,239      \$48,043,613

#### Add:

Balance of net profit per statement of profit and loss . . . . .	16,704,310	14,017,883
Transfer from appropriated surplus . . . . .	—	7,000,000
	<b>72,661,549</b>	<b>69,061,496</b>

#### Deduct:

Appropriation for dividends, 80 cents per share in 1959 (1958—80¢) . . . . .	13,104,262	13,104,257
Excess over book value of purchase price of shares in a subsidiary company . . . . .	866,114	—
<b>Balance at end of period, per Balance Sheet . . . . .</b>	<b>\$58,691,173</b>	<b>\$55,957,239</b>

# Auditors' Report

## Statement as to Unconsolidated Subsidiary Companies

Except to the extent of dividends received from unconsolidated subsidiary companies and additions made to the allowance for depreciation of investments in subsidiary mining companies, neither profits nor losses of unconsolidated subsidiaries, so far as they concern the holding company, have been dealt with in the accounts of the holding company for 1959 or prior years. For 1959 the excess of the holding company's proportion of profits over the dividends received is greater than its proportion of losses of unconsolidated subsidiary companies, for which no allowance has been made. The balances of profits (less dividends) and losses, as well as development and maintenance expenses of certain unconsolidated subsidiary mining companies which were not in production, are carried forward in the accounts of the subsidiary companies.

HELLIWELL, MACLACHLAN & Co.,  
*Chartered Accountants.*

VANCOUVER, B.C., FEBRUARY 23, 1960.

## Auditors' Report

We have examined the consolidated balance sheet of The Consolidated Mining and Smelting Company of Canada Limited and its wholly-owned subsidiary companies as at December 31, 1959, and the related statements of profit and loss and earned surplus for the year ended on that date and have obtained all the information and explanations we have required. Our examination has included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion the balance sheet and the related statements of profit and loss and earned surplus are properly drawn up so as to exhibit a true and correct view of the state of the affairs of the Company and its wholly-owned subsidiary companies as at December 31, 1959, and the results of their operations for the year ended on that date, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year and according to the best of our information and the explanations given to us and as shown by the books of the Companies.

HELLIWELL, MACLACHLAN & Co.,  
*Chartered Accountants.*

VANCOUVER, B.C., FEBRUARY 23, 1960.

## Comparative Highlights

	1959	1958	1957	1956	1955
Sales of all products . . . . .	<b>\$110,084,000</b>	\$103,900,000	\$118,858,000	\$135,732,000	\$145,104,000
Net Profit . . . . .	<b>16,704,000</b>	14,018,000	18,538,000	30,029,000	32,910,000
Net profit per share . . . . .	<b>\$1.02</b>	\$0.86	\$1.13	\$1.83	\$2.01
Dividends declared . . . . .	<b>13,104,000</b>	13,104,000	22,113,000	27,027,000	28,665,000
Dividends per share . . . . .	<b>\$0.80</b>	\$0.80	\$1.35	\$1.65	\$1.75
Depreciation . . . . .	<b>9,392,000</b>	9,599,000	9,536,000	9,684,000	9,477,000
Income, mining and property taxes . . .	<b>12,465,000</b>	8,960,000	11,100,000	17,900,000	21,052,000
Working capital . . . . .	<b>95,925,000</b>	92,318,000	84,933,000	81,879,000	74,806,000
Net capital expenditures . . . . .	<b>7,918,000</b>	3,050,000	6,003,000	6,224,000	3,794,000
Number of employees . . . . .	<b>6,985</b>	7,101	7,291	7,814	7,980
Number of shareholders . . . . .	<b>34,481</b>	34,073	32,881	30,431	27,795

# PRODUCTS

## Refined Metals

TADANAC BRAND

Lead	Zinc	Gold	Cadmium
Indium	Bismuth	Silver	

## Chemical Fertilizers

ELEPHANT BRAND

Ammonium Sulphate	Ammonium Phosphates
Ammonium Nitrate-Phosphate	Ammonium Nitrate (Nitraprills)
Complete Fertilizers	
Anhydrous Ammonia	Aqua Ammonia
Ammonium Nitrate Solution	Ammonium Phosphate Solution
Phosphoric Acid	

## Heavy Chemicals

Anhydrous Ammonia	Sulphuric Acid (Contact)
Oleum	

## Sundry

Antimonial Lead—COMINCO BRAND  
 High Purity Metals for the Electronics Industry—TADANAC BRAND

NOTE: TADANAC, COMINCO and ELEPHANT BRAND are registered  
 trade marks of the Company.

## Output of Principal Products

YEAR	(1) Lead Short Tons	(1) Zinc Short Tons	(1) Gold Tons	(1) Silver Ozs.	Cad- mium Short Tons	Bis- muth Short Tons	(1) Fertilizer Short Tons	Solid Fertilizer Short Tons	Liquid Fertilizer Short Tons
1894 to 1949 . . .	4,707,293	3,156,710	3,213,478	235,344,567	6,113	1,705	3,173	4,361,188	
1950 . . . . .	170,364	156,021	62,186	12,120,568	349	97	398	542,636	
1951 . . . . .	162,712	164,513	74,347	14,417,391	542	104	173	557,776	
1952 . . . . .	183,389	161,357	84,347	12,965,511	338	71	106	593,455	
1953 . . . . .	166,356	185,859	91,321	16,144,791	420	36	348	599,996	
1954 . . . . .	166,379	147,776	96,395	11,901,184	467	113	173	693,949	595
1955 . . . . .	149,795	190,910	89,071	10,082,187	759	80	252	678,802	10,193
1956 . . . . .	149,262	193,041	97,428	11,583,530	884	78	328	673,044	20,449
1957 . . . . .	144,017	189,295	95,403	10,877,532	901	73	400	630,622	32,373
1958 . . . . .	134,827	193,514	69,962	12,875,160	643	86	360	656,697	45,714
1959 . . . . .	140,881	194,499	66,117	9,367,029	838	91	246	620,162	56,046
1894 to date . . .	6,275,275	4,933,495	4,040,055	357,679,450	12,254	2,534	5,957	10,608,327	165,370

(1) Includes metal sold in concentrates and unrefined products.

# Divisions

## Chemical and Fertilizer Operations

E. A. G. COLLS, *Manager* . . . . . Trail, B.C.

## Chemical and Fertilizer Sales

A. WILKINSON, *Manager* . . . . . Montreal, P.Q.

## Comptroller's

G. A. WALLINGER, *Vice-President and Comptroller* . . . . . Montreal, P.Q.

## Engineering

J. V. ROGERS, *Manager* . . . . . Trail, B.C.

## Legal

C. H. B. FRERE, *General Solicitor* . . . . . Montreal, P.Q.

## Metallurgical Operations

R. R. MCNAUGHTON, *Manager* . . . . . Trail, B.C.

## Metal Sales

H. T. FARGEY, *Manager* . . . . . Montreal, P.Q.

## Mines and Exploration

W. G. JEWITT, *Vice-President i/c of Mines* . . . . . Trail, B.C.

## Personnel

P. F. MCINTYRE, *Manager* . . . . . Trail, B.C.

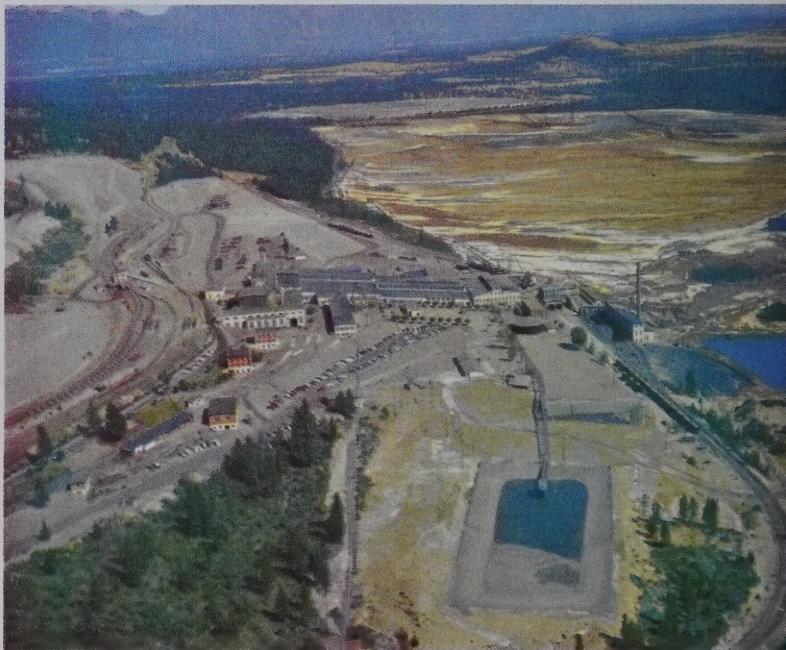
## Purchasing

A. L. IRWIN, *Manager* . . . . . Trail, B.C.

## Research and Development

A. O. WOLFF, *Director* . . . . . Montreal, P.Q.

# OPERATIONS AND INTERESTS

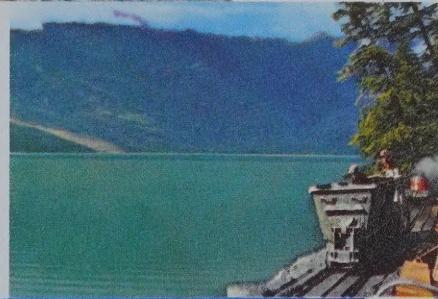


ABOVE: The Sullivan Concentrator and iron concentrate storage at Kimberley, B.C. Ore produced by the Sullivan Mine is transported four miles to the Concentrator, where the treatment of it yields lead, zinc, and iron concentrates. The lead and zinc concentrates are shipped to the metallurgical plants at Trail. The iron concentrate has accumulated to form the largest known iron resource in Western Canada. It contains over 15,000,000 tons of recoverable iron and is increased by more than 350,000 tons of iron annually. The iron and steel smelter under construction nearby will utilize this raw material.

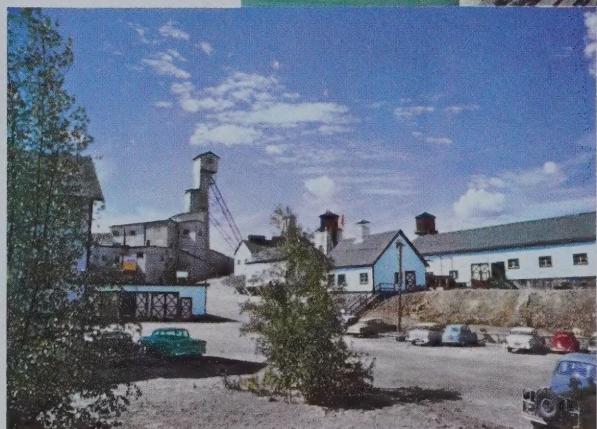
ABOVE LEFT: The ammonia and nitric acid plants at the Company's Alberta Nitrogen Department, Calgary, Alberta. Cominco has under construction near these buildings a \$5,000,000 plant which will produce 100 tons per day of urea. This chemical is an important fertilizer and also has uses in the field of animal husbandry and the plastics industry.



ABOVE: Applying Elephant Brand aqua ammonia, a liquid fertilizer, at a farm in the State of Washington. Liquid fertilizers are applied in various ways. The equipment pictured has claw-like projections which rake through soil, and plastic tubes mounted behind each carry the solution into the soil at the desired depth.



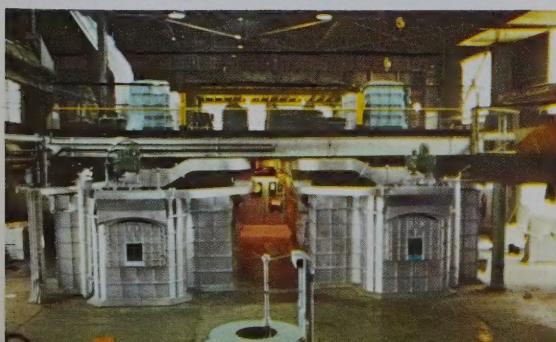
RIGHT: Dumping development waste at a lead-zinc property on Duncan Lake in south-eastern B.C. Here the Company is conducting underground exploration work to determine whether or not a mine can be established. Similar work is in progress at other locations.



ABOVE: Headframe and surface buildings at the Company's Con gold mine, Yellowknife, Northwest Territories. The property was staked by Company personnel in 1935, and the mine was brought into production in 1938. Two events were worthy of note at the Con in 1959 — the visit of Prince Philip in the summer, and the pouring of the 2,000th gold bar in the autumn.



ABOVE LEFT: Zinc slabs, ready for strapping in bundles and shipping to market. Molten zinc (note picture at lower left) is poured into moulds on a casting machine. As the moulds begin their return, the solidified zinc drops out in the form of 56-pound slabs. Tadanac Brand zinc is produced in a number of grades suited to the various end uses.



LEFT: Lead anodes en route from the Smelter to the Lead Refinery at Trail, B.C. Lead bullion produced in the Smelter is about 98% pure. It is cast into anode plates for refining by electrolysis. By-product silver, gold, antimony and bismuth are recovered. The refined Tadanac Brand lead is shipped to customers at a purity of over 99.99%.

LOWER LEFT: Induction furnaces in the Zinc Melting Room, Trail, B.C. Zinc is produced by electrolysis in the form of thin sheets. These must be melted and cast into slabs suitable for shipment to manufacturers. In recent years the Company has installed unique electric induction melting furnaces which perform the melting function effectively and at lower cost than earlier equipment.

